

**SMALL SIGNAL DIODE**

**VOLTAGE RANGE 120 to 250 Volts CURRENT 200 mAmpere**

**FEATURES**

- \* Fast Switching Speed
- \* Surface Mount Package Ideally Suited for Automatic Insertion
- \* For General Purpose Switching Applications

**MECHANICAL DATA**

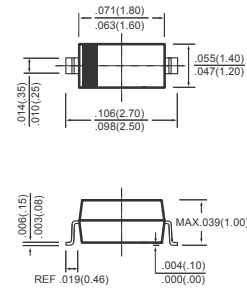
- \* Case: Molded plastic
- \* Epoxy: UL 94V-O rate flame retardant
- \* Lead: MIL-STD-202E method 208C guaranteed
- \* Mounting position: Any
- \* Weight: 0.004 grams

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.  
Single phase, half wave, 60 Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.



**SOD-323**



**MAXIMUM RATINGS** (@T<sub>A</sub>=25°C unless otherwise noted)

RATINGS	SYMBOL	BAV19WS	BAV20WS	BAV21WS	UNITS
Non-Repetitive Peak Reverse Voltage	V <sub>RM</sub>	120	200	250	Volts
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	100	150	200	Volts
Maximum Working Peak reverse Voltage	V <sub>RWM</sub>				
Maximum DC Blocking Voltage	V <sub>R</sub>				
RMS Reverse Voltage	V <sub>RMS</sub>	71	106	141	Volts
Forward Continuous Current	I <sub>FM</sub>		400		mAmps
Average Rectified Output Current	I <sub>O</sub>		200		mAmps
Peak Forward Surge Current	I <sub>FSM</sub>		2.5		Amps
			0.5		
Repetitive Peak Forward Current	I <sub>FRM</sub>		625		mAmps
Reverse Recovery Time (I <sub>F</sub> =I <sub>R</sub> =30mA I <sub>RR</sub> =0.1X I <sub>R</sub> , R <sub>L</sub> =100Ω)	T <sub>rr</sub>		50		nS
Capacitance between terminals (V <sub>R</sub> =0V, f=1MHz)	C <sub>T</sub>		5		pF
Power Dissipation	P <sub>D</sub>		200		mW
Storage Temperature Range	T <sub>STG</sub>		-65 to + 150		°C

**ELECTRICAL CHARACTERISTICS** (@T<sub>A</sub>=25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL	BAV19WS	BAV20WS	BAV21WS	UNITS
Forward Voltage	V <sub>F</sub>		1.0		Volts
			1.25		
Reverse Current	I <sub>R</sub>		0.1		uAmps

Note 1: "Fully ROHS compliant", "100% Sn plating (Pb-free)".

2007-1

**RATING AND CHARACTERISTICS CURVES ( BAV19WS/BAV20WS/BAV21WS )**

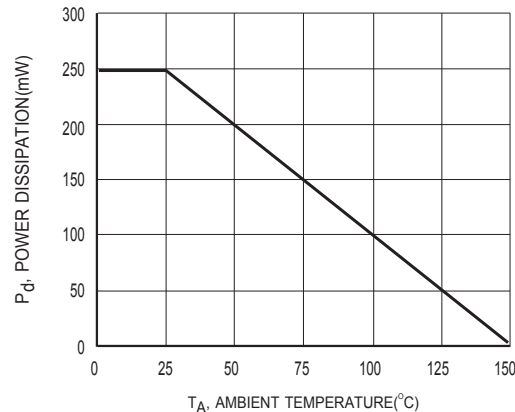


Figure1 Power Derating Curve

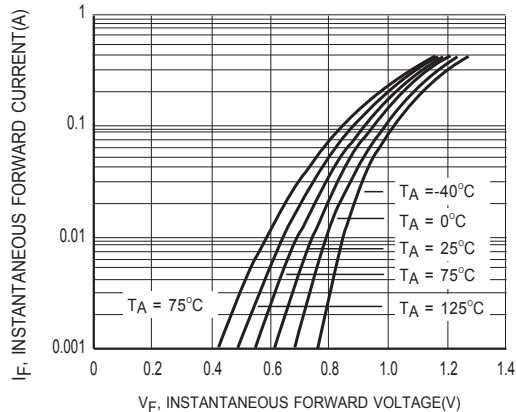


Figure2 Typical Forward Characteristics

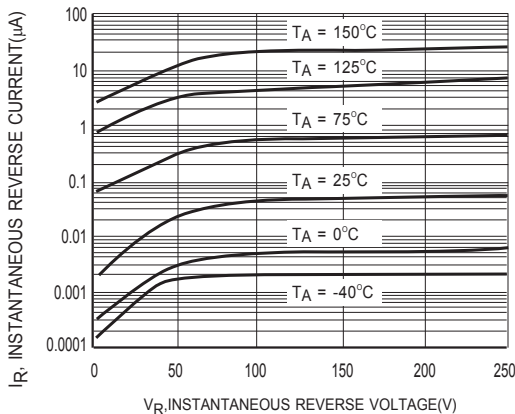


Figure3 Typical Reverse Characteristics

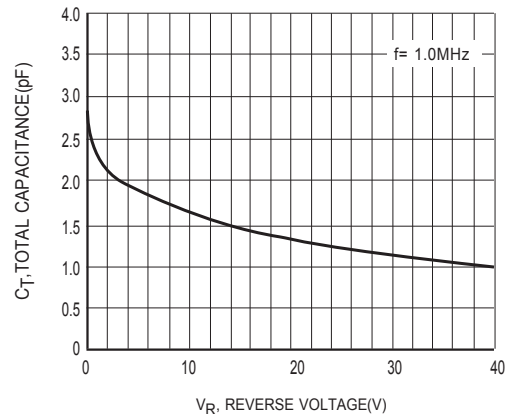


Figure4 Typical Capacitance vs Reverse Voltage

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